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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,226	06/25/2003	Carl T. Brighton	UPN-4238	4332

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EXAMINER
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JOHNSON, SHEVON ELIZABETH

ART UNIT	PAPER-NUMBER
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3766

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/603,226	Applicant(s) BRIGHTON ET AL.	
	Examiner Shevon E. Johnson	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 3-6,12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/10/2004, 9/22/2005, 9/22/2005</u> | 6) <input type="checkbox"/> Other: _____  |

In a preliminary amendment dated May 9, 2005 applicant cancelled claims 15-18. Claims 1-14 are pending in the application.

***Claim Objections***

1. Claim 13 is objected to because of the following informalities: Claim 13 is objected to under 37 CFR 1.75 (b) since it does not substantially differ from claim 1. Both claims recite the subject matter of a signal generator that generates compound electric signals that down-regulate the gene expression of metalloproteases. No additional structure is set forth in the claim language. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-2, 7-10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Brighton et al. (U.S. Patent No. 4,535,775).**

In regards to claims 1 and 13, Brighton et al. discloses a signal generator 18 that generates compound electric signals for promoting bone healing and a means for communicating 19 said compound electric signals (col. 1, lines 6-8, col. 2, lines 19-29, Fig.1).

In regards to claim 2, Brighton et al. discloses a device wherein said compound electric signals comprise a 60 kHz sine wave having a peak to peak voltage of approximately 4.6 V to 7.6 V (col. 2, lines 30-35, Fig. 1).

In regards to claims 7 and 8, Brighton et al. discloses a device comprising means for holding (i.e. Velcro™ strap) said signal generator in proximity of a patient for communication with said capacitive and/or inductive coupling device (col. 2, lines 17-18, Fig. 1).

In regards to claims 9 and 10, Brighton et al. discloses a device wherein said holding means comprises one of a pocket in one of a knee wrap and leg wrap and/or a holster worn at the patient's waist (col. 2, lines 21-24).

**4. Claims 7-10 are rejected under 35 U.S.C. 102(b) as anticipated by Brighton et al. (U.S. Patent No. 4,535,775) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brighton et al. 775' in view of Ryaby et al (U.S. Patent No. 4,266,533).**

In regards to claims 7-10, Brighton et al. inherently discloses a device comprising means for holding (i.e. Velcro™ strap) and holding means comprises one of a pocket in one of a knee wrap and leg wrap and/or a holster worn at the patient's waist. However, Ryaby et al. also discloses a means for holding (i.e. Velcro™ strap). Therefore, it would have been obvious to anyone skilled in the art to modify the device of Brighton et al. in view of Ryaby et al. in order to provide a means for holding said signal generator in proximity of a patient.

**5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Dugot (U.S. Patent No. 4,600,010) and/or Fleming (U.S. Patent No. 5,690,692).**

In regards to claims 1 and 2, Dugot discloses a device comprising: a signal generator that generates compound electric signals comprise a 60 kHz sine wave having a peak to peak voltage of approximately 4.6 V to 7.6 V; and means for communicating said compound electric signals to said capacitive and/or inductive coupling device (010': col. 2, lines 65-68 and col. 10, lines 12-18; 692': col. 5, lines 25-28).

***Claim Rejections - 35 USC § 103***

**6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brighton et al. (U.S. Patent No. 4,535,775) in view of Erickson et al. (U.S. Patent 5,565,005).**

In regards to claim 11, Brighton et al. discloses the invention substantially as claimed except comprising a wireless connection. However, Erickson et al. discloses a system and method of operation comprising a wireless connection. Erickson et al. teaches it is well known in the art to use a pulsed electromagnetic field (capacitive coupling stimulators) or a 60 kHz sinusoidal electric field to promote

healing at the injury site (col. 1, lines 27-45). Therefore, it would have been obvious to one of ordinary skill in the art to modify Brighton et al. in view of Erickson et al. to provide multiple communication means.

***Allowable Subject Matter***

8. Claims 3-6, 12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shevon E. Johnson whose telephone number is (571) 272-2010. The examiner can normally be reached on M-F (8 a.m. - 4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shevon Johnson  
Art Unit 3766

  
Robert Pezzuto  
Supervisory Patent Examiner  
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